(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



T DELTA BUUNDEN IN BELLIKK OMER BELLA BELLA BELLA FOR DER BELLA BELLA BUUN IN BELLA BELLA BELLA BELLA BELLA BU

(43) International Publication Date 4 November 2004 (04.11.2004)

PCT

(10) International Publication Number WO 2004/095870 A1

(51) International Patent Classification7:

H04Q 7/38

(21) International Application Number:

PCT/JP2004/005869

(22) International Filing Date: 23 April 2004 (23.04.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0350128

24 April 2003 (24.04.2003) FI

- (71) Applicant (for all designated States except US): NEC CORPORATION [JP/JP]; 7-1, Shiba 5-chome, Minato-ku, Tokyo_108-8001 (JP).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): SANCHEZ, Javier [FR/FR]; 76, av. de la Republique, F-92500_Rueil-Malmaison (FR).
- (74) Agents: MIYAZAKI, Teruo et al.; 16th Kowa Bldg., 8th Floor, 9-20, Akasaka 1-chome, Minato-ku, Tokyo 107-0052 (JP).

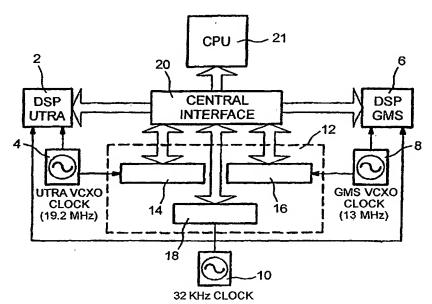
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: METHOD OF TIME AND FREQUENCY SYNCHRONIZATION OF MULTIMODE TERMINAL



(57) Abstract: A method of time-synchronizing at least two radio access modules of a multimode communication terminal capable to function according to at least two distinct radio access techniques in a cellular telecommunication network in which one of the radio access modules is active in the current cell and the other radio access module is in a passive state in the current cell comprises the steps of: (a) measuring for each of the cells adjacent to the current cell a time offset T?offset#191 between the start of a specific frame of the first radio technique and the start of a specific frame of the second radio access technique, and (b) using the time offset T?offset#191 measured in step (a) for synchronizing the passive radio access module with the active radio access modules.



WO 2004/095870 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.